

CARSON RIVER BASIN, UPPER CARSON RIVER BASIN

10308789 LEVIATHAN CREEK ABOVE ASPEN CREEK, NEAR MARKLEEVILLE, CA

LOCATION.—Lat 38°43'01", long 119°39'33", in NE ¼ NW ¼ sec. 15, T.10 N., R.21 E., Alpine County, Hydrologic Unit 16050201, on left bank, 3.2 mi north of State Highway 89, and 6.5 mi east of Markleeville.

DRAINAGE AREA.—7.07 mi².

PERIOD OF RECORD.—October 1998 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 6,700 ft above NGVD of 1929, from topographic map.

REMARKS.—Records fair except those below 0.5 ft³/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 24 ft³/s, Apr. 28, 1999, gage height, 5.14 ft; no flow on some days in most years.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 10 ft³/s, or maximum:

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|
| Mar. 21 | 1830 | 13 | 4.83 |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 1 | 0.09 | 0.17 | 0.21 | 0.28 | e0.49 | 0.24 | 1.3 | e0.84 | 0.29 | 0.32 | 0.00 | 0.01 |
| 2 | 0.20 | 0.20 | 0.22 | 0.27 | e0.57 | 0.25 | 0.92 | e0.76 | 0.26 | 0.26 | 0.00 | 0.01 |
| 3 | 0.10 | 0.18 | 0.22 | 0.25 | e0.41 | 0.24 | 1.2 | e0.74 | 0.23 | 0.08 | 0.00 | 0.02 |
| 4 | 0.09 | 0.18 | 0.24 | 0.26 | e0.34 | 0.21 | 2.2 | e0.70 | 0.21 | 0.06 | 0.00 | 0.02 |
| 5 | 0.09 | 0.17 | 0.27 | 0.29 | e0.38 | 0.23 | 2.4 | e0.69 | 0.18 | 0.05 | 0.00 | 0.02 |
| 6 | 0.08 | 0.18 | 0.47 | 0.29 | 0.48 | 0.34 | 1.6 | e0.63 | 0.18 | 0.17 | 0.05 | 0.01 |
| 7 | 0.09 | 0.18 | 0.40 | 0.27 | 0.38 | 0.35 | 1.4 | e0.57 | 0.16 | 0.26 | 0.10 | 0.01 |
| 8 | 0.09 | 0.21 | e0.20 | e0.26 | e0.29 | 0.43 | 1.3 | e0.53 | 0.16 | 0.22 | 0.10 | 0.01 |
| 9 | 0.10 | e0.23 | e0.22 | e0.27 | e0.30 | 0.73 | 1.3 | e0.46 | 0.19 | 0.27 | 0.09 | 0.01 |
| 10 | 0.12 | 0.36 | e0.22 | 0.29 | e0.29 | 0.54 | 1.3 | e0.44 | 0.35 | 0.27 | 0.09 | 0.01 |
| 11 | 0.13 | 0.29 | 0.23 | 0.28 | e0.29 | 0.49 | 1.2 | e0.57 | 0.31 | 0.26 | 0.09 | 0.01 |
| 12 | 0.14 | 0.28 | 0.24 | 0.28 | e0.29 | 0.70 | 1.2 | e0.44 | 0.15 | 0.26 | 0.49 | 0.01 |
| 13 | 0.14 | 0.22 | 0.23 | e0.29 | e0.30 | 0.82 | e1.3 | 0.35 | 0.14 | 0.25 | 0.04 | 0.01 |
| 14 | 0.14 | e0.23 | e0.30 | e0.31 | e0.33 | 1.1 | e1.5 | 0.41 | 0.12 | 0.25 | 0.03 | 0.02 |
| 15 | 0.13 | 0.20 | 0.29 | 0.33 | 0.22 | 2.0 | e1.2 | 0.41 | 0.12 | 0.24 | 0.03 | 0.03 |
| 16 | 0.15 | e0.22 | 0.41 | e0.32 | 0.34 | 1.8 | e1.6 | 0.39 | 0.18 | 0.25 | 0.03 | 0.02 |
| 17 | 0.14 | 0.21 | 0.36 | 0.29 | 0.35 | 2.3 | e1.9 | 0.38 | 0.32 | 0.24 | 0.01 | 0.02 |
| 18 | 0.14 | 0.23 | 0.31 | 0.27 | e0.31 | 3.9 | e1.4 | 0.38 | 0.12 | 0.15 | 0.01 | 0.03 |
| 19 | 0.17 | 0.47 | 0.28 | 0.28 | e0.26 | 5.6 | e1.3 | 0.42 | 0.19 | 0.20 | 0.01 | 0.04 |
| 20 | 0.17 | 0.39 | e0.26 | 0.32 | e0.25 | 5.6 | e1.2 | 0.41 | 0.24 | 0.24 | 0.03 | 0.04 |
| 21 | 0.17 | 0.50 | e0.25 | 0.25 | e0.24 | 5.8 | 1.3 | 0.41 | 0.36 | 0.21 | 0.02 | 0.04 |
| 22 | 0.17 | 0.33 | e0.25 | e0.25 | e0.24 | 5.7 | 1.5 | 0.40 | 0.44 | 0.23 | 0.02 | 0.04 |
| 23 | 0.19 | 0.18 | e0.29 | e0.27 | e0.30 | 4.5 | 1.4 | 0.38 | 0.73 | 0.14 | 0.02 | 0.09 |
| 24 | 0.18 | 0.22 | 0.53 | 0.28 | e0.30 | 4.2 | e1.3 | 0.37 | 0.77 | 0.03 | 0.02 | 0.14 |
| 25 | 0.16 | 0.18 | e0.46 | 0.31 | e0.30 | 3.1 | e1.2 | 0.37 | 0.72 | 0.02 | 0.01 | 0.16 |
| 26 | 0.18 | 0.18 | e0.39 | 0.32 | e0.30 | 2.3 | e1.1 | 0.36 | 0.61 | 0.01 | 0.01 | 0.09 |
| 27 | 0.17 | 0.20 | 0.37 | e0.30 | e0.30 | 1.9 | e1.1 | 0.34 | 0.46 | 0.01 | 0.08 | 0.04 |
| 28 | 0.16 | 0.19 | e0.36 | e0.30 | 0.29 | 1.9 | e1.0 | 0.51 | 0.32 | 0.00 | 0.14 | 0.04 |
| 29 | 0.16 | 0.19 | e0.33 | e0.31 | 0.34 | 2.2 | e0.99 | 0.36 | 0.35 | 0.00 | 0.14 | 0.04 |
| 30 | 0.17 | 0.19 | 0.40 | e0.31 | --- | 2.9 | e0.91 | 0.33 | 0.25 | 0.00 | 0.10 | 0.04 |
| 31 | 0.16 | --- | 0.30 | e0.30 | --- | 2.2 | --- | 0.32 | --- | 0.00 | 0.02 | --- |
| TOTAL | 4.37 | 7.16 | 9.51 | 8.90 | 9.48 | 64.57 | 40.52 | 14.67 | 9.11 | 4.95 | 1.78 | 1.08 |
| MEAN | 0.14 | 0.24 | 0.31 | 0.29 | 0.33 | 2.08 | 1.35 | 0.47 | 0.30 | 0.16 | 0.06 | 0.04 |
| MAX | 0.20 | 0.50 | 0.53 | 0.33 | 0.57 | 5.8 | 2.4 | 0.84 | 0.77 | 0.32 | 0.49 | 0.16 |
| MIN | 0.08 | 0.17 | 0.20 | 0.25 | 0.22 | 0.21 | 0.91 | 0.32 | 0.12 | 0.00 | 0.00 | 0.01 |
| AC-FT | 8.7 | 14 | 19 | 18 | 19 | 128 | 80 | 29 | 18 | 9.8 | 3.5 | 2.1 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 0.16 | 0.25 | 0.25 | 0.32 | 0.48 | 1.31 | 2.38 | 2.27 | 0.60 | 0.21 | 0.15 | 0.17 |
| MAX | 0.34 | 0.36 | 0.39 | 0.47 | 1.10 | 2.08 | 5.38 | 9.69 | 2.18 | 0.56 | 0.31 | 0.46 |
| (WY) | 2000 | 1999 | 1999 | 1999 | 2004 | 1999 | 1999 | 1999 | 1999 | 1999 | 1999 | 1999 |
| MIN | 0.08 | 0.16 | 0.15 | 0.16 | 0.20 | 0.71 | 1.30 | 0.47 | 0.12 | 0.07 | 0.04 | 0.04 |
| (WY) | 2002 | 2001 | 2003 | 2001 | 2001 | 2001 | 2001 | 2004 | 2001 | 2001 | 2001 | 2004 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1999 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 228.37 | 176.10 | |
| ANNUAL MEAN | 0.63 | 0.48 | 0.48 |
| HIGHEST ANNUAL MEAN | | | 0.61 |
| LOWEST ANNUAL MEAN | | | 0.30 |
| HIGHEST DAILY MEAN | 5.4 | Mar 26 | 17 May 7 1999 |
| LOWEST DAILY MEAN | 0.00 | Aug 20 | 0.00 Aug 5 2001 |
| ANNUAL SEVEN-DAY MINIMUM | 0.02 | Jul 30 | 0.00 Jul 28 2004 |
| MAXIMUM PEAK FLOW | | 13 Mar 21 | 24 Apr 28 1999 |
| MAXIMUM PEAK STAGE | | 4.83 Mar 21 | 5.14 Apr 28 1999 |
| ANNUAL RUNOFF (AC-FT) | 453 | 349 | 344 |
| 10 PERCENT EXCEEDS | 2.0 | 1.2 | 1.3 |
| 50 PERCENT EXCEEDS | 0.29 | 0.26 | 0.22 |
| 90 PERCENT EXCEEDS | 0.07 | 0.02 | 0.06 |

e Estimated